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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**Complete if Known**

Application Number	09/306,749
Filing Date	May 7, 1999
First Named Inventor	Meade et al.
Group Art Unit	1655
Examiner Name	S. Zitomer
Attorney Docket Number	A-58762-9

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
SZ	A1	5,308,754	05/1994	Kankare et al.	
	A2	5,824,473	10/1998	Meade et al.	
	A3	6,153,737	11/2000	Manoharan et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Foreign Patent Document Country Code <sup>4</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Country or Patent Office	T <sup>6</sup>
SP	B1	0439036	07/31/91	Hoffman-La Roche	EPO	✓
	B2	2628838	09/22/1989	Kankare	France	✓

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
SZ	C1	Alsfasser, R. and van Eldik, R., "Novel Building Blocks for Biomimetic Assemblies. Synthesis, Characterization, and Spectroscopic and Electrochemical Properties of New Bidendate Ligands Derived from Lysine and Cysteine and Their Complexes with Bis(2,2'-bipyridine)ruthenium(II)," Inorg. Chem. 35:628-636 (1996)	✓
	C2	Codington et al., "Nucleosides. XIII. Synthesis of 3'-Amino-3'-deoxy-arabinosyl-uracil via 2', 3'-Epoxy-lyxosyl Nucleosides," J. Org. Chem. 27:163-167 (1962).	✓
	C3	Conway, N.E. et al., "Site-specific attachment of labels to the DNA backbone" In Oligonucleotides and Analogues: A Practical Approach, pg. 211-239 (Eckstein, F. ed.) IRL Press, Oxford, 1991.	✓
	C4	Gait, M.J... "Oligoribonucleotide Synthesis," In Oligonucleotides and Analogues: A Practical Approach, pg. 25-48 (Eckstein, F. ed.) IRL Press, Oxford, 1991.	✓
	C5	Hwang, J-T. et al., "Synthesis of Modified Oligodeoxynucleotides on a Solid Phase Support via Derivatization of a Selectively Revealed 2'-Amino-2-deoxyuridine," Organic Letters 1(12):2021-2024 (1999) - Abstract	✓
	C6	Hwang, J-T. et al., "Synthesis of 2'-Modified Oligodeoxynucleotides via On-column Conjugation," J. Org. Chem. 66(2):363-369 (2001) -Abstract	✓
	C7	Kirschenheuter et al., "An Improved Synthesis of 2'-Azido-2'-Deoxyuridine," Tetrahedron Letter, 35(46) 8517-8520 (1994).	✓
	C8	Krider, E. S. et al., Synthesis of 3' Metalated Oligonucleotides," Inorg. Chem. 40: 4002-4009 (2001)	✓
	C9	Kumar et al., "'A Simple Method for Introducing -SH/COOH Group at 5'-CH end of Oligonucleotide,'" Nucleosides & Nucleotides, 11(5):999-1002 (1992).	✓
	C10	McGee, et al., "2'-Amino-2'-deoxyuridine via an Intramolecular Cyclization of a Trichloroacetimidate," J. Org. Chem., 61:781-785 (1996).	✓
	C11	McGee et al., "Novel Nucleosides via Intramolecular Functionalization of 2,2'-Anhydrouridine Derivatives," Tetrahedron Letters, 37(12) 1995-1998 (1996).	

Examiner Signature	S. Zitomer	Date Considered	5-5-03
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<sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

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(Modified)**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	09/306,749
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TECH CENTER 1622 1600**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	✓
SF	C12	Mengel, R., et al., "A Simple Synthesis of 2'-Deoxy-2'-fluorocytidine by Nucleophilic Substitution of 2,2'-Anhydrocytidine with Potassium Fluoride/Crown Ether," Angew. Chem. Int'l. Ed. Engl., 17, No. 7:525 (1978).	✓
	C13	Moffatt, J.G., "Chemical Transformations of the Sugar Moity of Nucleosides," 1979	✓
	C14	Sebesta et al., "2'-Deoxy-2'-Alkoxyaminouridines: Novel 2'-Substituted Uridines prepared by Intramolecular Nucleophilic Ring Opening of 2, 2'-0-Anydrouridines," Tetrahedron, 52(46), 14385-14402 (Nov. 1996).	✓
	C15	Sinha, N.D. and Striepeke, S., "Oligonucleotides with reporter groups attached to the 5'-Terminus," In Oligonucleotides and Analogues: A Practical Approach, pg. 185-210 (Eckstein, F. ed.) IRL Press, Oxford, 1991.	✓
	C16	Tsuneo, M. et al., "Coumarin-fluorescein pair as a new donor-acceptor set for fluorescence energy transfer study of DNA," Tetrahedron Letters 41(15):2605-2608 (2000)	✓
	C17	Verheyden, J.P.H., et al., "Synthesis of Some Pyrimidine 2'-Amino-2'-deoxynucleosides," J. Org. Chem. 36(2):250-254 (1971).	✓
	C18	Yu, et al., "2' Ribose Ferrocene Oligonucleotides for Electronic Detection of Nucleic Acids," J. Org. Chem 66:2937-2942 (2001)	✓
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Examiner Signature	S. Zitomer	Date Considered	5-5-03
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

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